Volume 19 · 1984

# Immuno-genetics

*Editors*
JAN KLEIN, Tübingen, Germany
JEAN DAUSSET, Paris, France

*Editorial Assistant*
M. C. KIMMERLE, Tübingen, Germany

*Editorial Board*

B. D. BRONDZ, Moscow, U.S.S.R.
H. CANTOR, Boston, Massachusetts
P.-A. CAZENAVE, Paris, France
M. J. CRUMPTON, London, England
C. DAVID, Rochester, Minnesota
P. DÉMANT, Amsterdam, The Netherlands
E. GÜNTHER, Göttingen, Germany
G. HÄMMERLING, Heidelberg, Germany
P. IVÁNYI, Amsterdam, The Netherlands
B. KINDRED, Tübingen, Germany
C. MAWAS, Marseille, France
I. F. C. MCKENZIE, Melbourne, Australia
N. A. MITCHISON, London, England
Z. NAGY, Tübingen, Germany
P. A. PETERSON, Uppsala, Sweden
P. J. ROBINSON, Heidelberg, Germany
D. C. SHREFFLER, St. Louis, Missouri
E. SIMPSON, Harrow, England
M. STEINMETZ, Basel, Switzerland
A. SVEJGAARD, Copenhagen, Denmark
E. THORSBY, Oslo, Norway
H. WAGNER, Mainz, Germany
A. R. WILLIAMSON, Greenford, England
R. M. ZINKERNAGEL, Zurich, Switzerland

Springer International

**Immunogenetics**

Submission of a manuscript implies that the work described has not been published before (except in the form of an abstract or as part of a published lecture, review or thesis), that it is not under consideration for publication elsewhere, that its publication has been approved by all the authors and by the responsible authorities – tacitly or explicitly – in the institutes where the work was carried out and that, if accepted, it will not be published elsewhere in the same form, in either the same or another language, without the consent of the copyright holders. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. The copyright covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproductions, microform, electronic data base, video disks, or any other reproductions of similar nature, and translations.

Photographic reproduction, microform, electronic data base, video disks, or any other reproduction of text, figures, or tables from this journal is prohibited without permission obtained from the publisher.

The use of general descriptive names, trade names, trade marks, etc., in this publication, even if the former are not specifically identified, is not to be interpreted as exempt from the relevant protective laws and regulations.

While the advice and information in this journal is believed to be true and accurate at the date of going to press, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

*Special regulations for the USA*

Photocopies may be made for personal or internal use beyond that permitted by Section 107 or 108 of the U.S. Copyright Law, provided a fee is paid. This fee is $ 0.20 per page or a minimum of $ 1.00 if an article consists of less than five pages. Please pay this fee to the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, USA, stating the ISSN 00937711, volume, and first and last page numbers of each article copied.

The copyright owner's consent does not extend to copying for general distribution, for promotion, for creating new works, or for resale. Specific written permission must be obtained from the publisher for such copying.

*Other regulations*

Authors of this journal can benefit from library and photocopy fees collected by VG WORT if certain conditions are met. If an author lives in the Federal Republic of Germany or in West Berlin it is recommended that he contact Verwertungsgesellschaft WORT, Abteilung Wissenschaft, Goethestraße 49, D-8000 München 2, for detailed information.

*Printers:* Oscar Brandstetter Druckerei GmbH & Co. KG, Wiesbaden

© Springer-Verlag
Berlin Heidelberg 1984

Printed in Germany

# Author Index

Accolla, R.S. 349
Adams, M. 257
Aizawa, M. 381
Albert, F. 279
Alexander, C.B. 425
Allen, P.M. 175
Alton, T. 217
Amos, D.B. 63

Bailey, D.W. 539
Ball, E.J. 13
Baverstock, P.R. 257
Bender, K. 257
Bissbort, S. 257
Boyer, C. 279
Boyse, E.A. 149
Brdička, R. 257
Briles, W.E. 141
Brodsky, F.M. 179
Bronson, S.R. 409
Brown, A.R. 369
Brown, D.W. 141
Brown, S. 359
Buckler, C. 527
Buferne, M. 279
Butcher, G.W. 257

Charron, D.J. 155
Cohen, I.R. 449
Cohn, M. 527
Coligan, J.E. 27
Collins, N.H. 217
Collins, W.M. 141
Colombani, J. 435
Corte, G. 109
Cramer, D.V. 257
Cresswell, P. 63
Crispe, I.N. 511

Dausset, J. 435
Davidson, W.F. 163
Davisson, M. 527
Deeg, H.J. 359
Deere, M.C. 149
Démant, P. 321, 461
den Bieman, M. 257
Dove, W.F. 233, 343
Dupont, B. 39, 217

Eckels, D.D. 409
Epstein, M.A. 475
Epstein, R. 527

Faille, A. 155
Ferrone, S. 39, 109, 249
Festing, M.F.W. 257
Figueroa, F. 311
Flavell, R.A. 461
Flomenberg, N. 39
Forget, A. 117
Fox, H.S. 125
Frelinger, J.A. 195, 205
Friedman, A. 449
Fukuoka, Y. 493

Gascoigne, N.R.J. 511
Gaston, J.S.H. 475
Giles, C.M. 321
Goujet-Zalc, C. 155
Griffin, J. 195
Gros, P. 117
Günther, E. 257
Gutmann, D.H. 175
Guttmann, R.D. 257

Hála, K. 269
Harrison, D.E. 503
Hartzman, R.J. 409
Hauptfeld, M. 169
Hauptfeld, V. 169
Hedrich, H.J. 257
Henrotte, J.G. 435
Higuchi, Y. 519
Hilgers, J. 83
Hogarth, P.M. 83, 355, 539
Hood, L. 195

Igarashi, M. 249
Ikeda, H. 381
Ishikawa, N. 381

Johnson, A.H. 409
Johnson, L.L. 233

Kasahara, M. 381
Kashiwagi, N. 249
Kelus, A.S. 425
Kendall, P.B. 257
Kikuchi, Y. 381
Kindred, B. 243
Kindt, T.J. 27
Klein, J. 311
Kluge, R. 257
Koch, C. 131
Kozak, C.A. 163
Kresina, T.F. 369
Kuo, M.-C. 27

Ladiges, W.C. 359
Lamb, J.R. 409
Lanier, L. 539
Latham, S.E. 355
Lehmann, K. 527
Li, X.-M. 27
Long, E.O. 349

Macchi, M.J. 195, 205
Mach, B. 349

Mackay, I.R. 295
Mage, R.G. 425
Maher, L.J., III 343
Mahouy, G. 155
Marti, G.E. 27
Martin, G.R. 125
McCarthy, C. 77
McKenzie, I.F.C. 83, 355, 539
McLaughlin-Taylor, E. 195, 205
McMaster, W.R. 53
McMillan, M. 205
Mellor, A.L. 461
Melvold, R.W. 391
Miller, S.D. 391
Mitchinson, N.A. 487
Mobraaten, L.E. 503
Moen, T. 455
Mollenhauer, E. 321
Morishima, Y. 217
Moriwaki, K. 493
Morse, H.C., III 163
Moutier, R. 257
Mueller-Eckhardt, G. 335

Nahm, M. 169
Nardi, N. 487
Natali, P.G. 109
Natsuume-Sakai, S. 493
Nelles, M.J. 369
Nesbitt, M.N. 117
Neu, N. 269
Niederhuber, J.E. 175
Nisonoff, A. 369
Nižetić, D. 311

Obata, F. 249
Ogasawara, K. 381
Okuda, T. 493
Okuyama, T. 381
O'Neill, G.J. 335
Ostrand-Rosenberg, S. 77
Oudshoorn-Snoek, M. 461

Passmore, H.C. 87
Patel, P.J. 117
Pineau, M. 435
Pilarski, L.M. 301
Pious, D. 475
Ploegh, H.L. 95
Plytycz, B. 3
Pollack, M.S. 217
Prel, L. 335
Propert, D.N. 295

Quackenbush, L.J. 63
Qvigstad, E. 455

Radka, S.F. 63
Raff, R.F. 359
Rickinson, A.B. 475
Rigby, A. 83
Rittner, C. 321
Roos, M.H. 321
Roper, L.A. 87
Rowe, W. 527
Russo, C. 39

Sachs, J.A. 27
Schendel, D.J. 335
Schmitt-Verhulst, A.M. 279
Segatto, O. 109
Sell, T.W. 409
Sher, M.R. 175
Shreffler, D.C. 169
Silver, L.M. 125
Simon, B. 257
Skamene, E. 117
Sogn, J.A. 27
Spinella, D.G. 87
Stastny, P. 13
Storb, R. 359
Sunshine, G.H. 487
Sutton, V.R. 83

Tachibana, T. 493
Takahashi, M. 493
Takahashi, S. 493
Takenouchi, T. 381
Taylor, B.A. 539
Teillaud, J.-L. 155
Thorsby, E. 455
Toivanen, A. 131
Tosi, R. 109
Tung, J.-S. 149
Turmel, P. 155

Vainio, O. 131
van der Feltz, M.J.M. 95
van Zutphen, B. 257
von Deimling, O. 257

Wallace, L.E. 475
Wallis, A.E. 53
Waltenbaugh, C. 391
Wakisaka, A. 381
Wegmann, T.G. 301
Whittingham, S. 295
Wick, G. 269
Winchester, G. 487
Womack, J.E. 257
Woodward, J.G. 195, 205

Yamada, J. 257
Yamamoto, S. 519
Yang, S.Y. 217
Yoshii, M. 249
Young-Cooper, G.O. 425
Yunis, E.J. 217
Books Received 367
Book Reviews 267, 367
Erratum 368
In Memoriam 1
Letter to the Editor 93

# Subject Index

*Akr-2*
–, linkage to *Igl-1* 527
Alpha globin pseudogene 125
Antigen-presenting cells
–, self-nonself discrimination 487
Antinuclear antibody
–, kappa chain allotype Km(1) 295

B-L antigens
–, chicken 131
Blood magnesium levels
–, *H-2* control 435
*Bxr-1* locus 163

C2
–, polymorphism 493
C4
–, antibody response to 87
C4 polymorphism 335
–, human 321
Chicken
–, MHC 131
–, natural antibodies to MHC 269
–, RSV response 141
Class I
–, HLA 39
–, T-cell clones 39
Class II antigens
–, marmoset 155
–, regulation of expression 349
Class II, human
–, monoclonal antibodies 179
Class II MHC antigen 33.1
–, human 27
Class II
–, rat cDNA sequence 53
Cloned T cells
–, stimulation by class I antigens 279
Cloning
–, *H-2D*$^p$ gene 195
Cross-reactivity
–, class II 249
–, man 249
–, mouse 249
CTL diversity 511

DC-1 antigens
–, tissue distribution 109
DLA class I antigens
–, glycosylation 95
DLA
–, PLT test 359
cDNA sequence
–, rat 53
Dog
–, MHC 359

Embryonal carcinoma (EC) cells
–, H-2 expression 343
Epitopes
–, HLA-DR7 63
Evolution
–, *H-2-t* 311

Frog
–, MHC 3

GAT
–, immune response 391
Glycosylation
–, DLA antigens 95
Graft vs host reaction
–, *H-2*-restricted 243
GVHR
–, *H-2*-restricted 243

*H-2D*$^p$ gene
–, cloning 195
–, transfection 205
H-3
–, teratocarcinomas 77
H-13
–, teratocarcinomas 77
Helper T cells
–, H-2D reactive 301
HLA-A, B
–, IEF patterns 217
HLA-DR antigens
-tissue distribution 109
HLA-DR
–, T-cell lines 13
HLA-DR7 epitopes 63
HLA
–, T-cell clones 39
H-Y
–, in teratocarcinomas 233

Idiotypes
–, in $F_1$ hybrid mice 369
*Igl-1*
–, linkage to *Akr-2* 527
Immune response
–, GAT 391
Immune response genes
–, primary antigen deposit 449

Kappa chain allotype Km(1)
–, antinuclear antibody 295
Kappa chain expression in rabbits 425

Leprosy
–, regulation of resistance to 117
Liposomes
–, class I antigens 279

Ly-5 149
Ly-7
–, location of 539
*Ly-9* locus 163
*Ly-17* locus 163
Ly-25.1 specificity 83
Ly-26.1
–, alloantigen 355

Macrophage
–, expression of functions in hybridomas 519
Magnesium in blood
*-H-2* control 435
Marmoset,
–, class II antigens 155
MB3 antigens
polymorphism 381
MHC
–, chicken 131, 269
–, class II 131
–, frog 3
–, natural antibodies 269
Minor alloantigens
–, CTL 511
Monoclonal antibodies
–, human class II 179
–, mouse MHC 169
MT3-like restriction 13
Mutant HLA antigens 475

Natural chicken antibodies 269

Ontogeny
–, DC-1 109
–, HLA-DR 109

Polymorphism
–, C2 493
–, C4 321, 335
–, human 321
–, human class II 27
–, MB3 antigens 381
Primed lymphocyte test (PLT)
–, dog 359

Qa-m208 antigen 461

Rabbit
–, kappa chains 425
*Rana temporaria*
–, MHC 3
Rat
–, biochemical markers 257
Recombinants
–, *H-2* 175
Regulation of HLA class II expression 349
Retroviral antigens 163
Rous sarcoma virus
–, *B* complex 141
*RT1-B* region
–, sequence cDNA 53

*Skn* gene
–, graft rejection 503

T-cell clones
–, restriction 409, 455
T-cell lines
–, human 13
*t* Complex
–, alpha globin 125
*t* haplotypes
–, evolution of *H-2* 311
Teratocarcinoma 402AX
–, class II expression 77
Teratocarcinoma PCC7
–, H-Y 233
Tissue distribution
–, DC-1 109
–, HLA-DR 109
T lymphocyte clones
–, human 39
Transfection
*-H-2D$^p$* gene 205

Virus-specific cytotoxic T cells
–, mutant HLA antigens 475